

IN THE CLAIMS

Please amend the claims as follows:

1. (Withdrawn) A prepreg, comprising:

reinforcing fiber,

a sheet-like reinforcing fiber substrate containing reinforcing fiber, and

a matrix resin,

wherein said matrix resin is impregnated into said sheet-like reinforcing fiber substrate and also covers one surface of said sheet-like reinforcing fiber substrate, and a matrix resin impregnation ratio is within a range of 35% to 95%.

2. (Currently Amended) A prepreg, comprising:

reinforcing fiber,

a reinforcing fiber substrate in the form of a sheet and containing reinforcing fiber,

and

a matrix resin,

wherein said matrix resin exists on both surfaces of said reinforcing fiber substrate,

~~and wherein~~ a portion inside said reinforcing fiber substrate into which said matrix resin has not been impregnated is continuous, and

wherein said matrix resin comprises a microcapsule based latent curing agent.

3. (Withdrawn) A prepreg comprising a sheet-like reinforcing fiber substrate formed from a reinforcing fiber woven fabric, and a matrix resin, wherein at least one surface displays a sea-and-island-type pattern comprising resin-impregnated portions (island portions) where said matrix resin is present at said surface, and fiber portions (sea portions) where said matrix resin is not present at said surface, a surface coverage ratio of said matrix

resin on surfaces with said sea-and-island-type pattern is within a range of 3% to 80%, and a weave intersection coverage ratio for said island portions, represented by a formula (1) shown below, is at least 40%:

$$\text{Island portions weave intersection coverage ratio (\%)} = (T/Y) \times 100 \quad (1)$$

(wherein, T represents a number of island portions that cover weave intersections, and Y represents a number of weave intersections within said reinforcing fiber woven fabric on said surface with said sea-and-island-type pattern).

4. (Original) A prepreg according to any one of claim 1 through claim 3, wherein said matrix resin is a thermosetting resin composition.

5. (Original) A prepreg according to claim 4, wherein said thermosetting resin composition is curable by holding at 90°C for 2 hours.

6. (Original) A prepreg according to claim 4, wherein a minimum viscosity of said thermosetting resin composition is no more than 1000 poise.

7. (Original) A prepreg according to claim 4, wherein said thermosetting resin composition comprises epoxy resin as a primary component.

8. (Previously Presented) A prepreg according to claim 4, wherein said thermosetting resin composition also comprises a thermoplastic resin, and said thermoplastic resin is not dissolved within said thermosetting resin composition.

9. (Original) A prepreg according to claim 8, wherein said thermoplastic resin comprises short fibers of thermoplastic resin with a length of 1 to 50 mm.

10. (Original) A prepreg according to claim 9, wherein said short fibers of thermoplastic resin have a size of no more than 300 tex.

11. (Original) A prepreg according to any one of claim 1 through claim 3, wherein said reinforcing fibers are carbon fiber and/or glass fiber.

12. (Currently Amended) A prepreg according to any one of claim 1 through claim 3, wherein said ~~sheet-like~~ reinforcing fiber substrate in the form of a sheet has a fiber weight within a range of 200 g/m² to 1500 g/m².

13. (Currently Amended) A prepreg according to any one of claim 1 through claim 3, wherein said ~~sheet-like~~ reinforcing fiber substrate in the form of a sheet is in a form selected from the group consisting of unidirectional materials, woven fabrics, knit fabrics, braided fabrics, mat materials, non-woven fabrics, and stitched sheets.

14. (Currently Amended) A prepreg according to any one of claim 1 through claim 3, wherein said ~~sheet-like~~ reinforcing fiber substrate in the form of a sheet has a thickness of at least 200 µm.

15. (Withdrawn- Previously Presented) A process for producing a prepreg, comprising:

applying a matrix resin on a resin support sheet,

bonding a matrix resin-coated surface of said resin support sheet to both surfaces of a reinforcing fiber substrate in the form of a sheet, and

pressing a laminate of said resin support sheets and said reinforcing fiber substrate under temperature conditions ranging from room temperature to 40°C in order to cause said matrix resin to impregnate said reinforcing fiber substrate,

thus forming a prepreg in which an interior of said reinforcing fiber substrate comprises a continuous portion that has not been impregnated with said matrix resin.

16. (Withdrawn) A process for producing a prepreg, comprising the steps of applying a matrix resin on a resin support sheet, bonding a matrix resin-coated surface of said resin support sheet to one surface of a reinforcing fiber woven fabric, bonding a protective film to another surface of said reinforcing fiber woven fabric, subsequently applying heat and/or pressure in order to cause said matrix resin to impregnate said reinforcing fiber woven fabric, thus forming a prepreg in which a surface of said reinforcing fiber woven fabric facing said protective film displays a sea-and-island-pattern comprising resin-impregnated portions (island portions) where said matrix resin is present at said surface and fiber portions (sea portions) where said matrix resin is not present at said surface.

17. (Withdrawn) A process for producing a prepreg according to claim 16, wherein a thermosetting resin composition containing a thermoplastic resin that is not dissolved within said thermosetting resin composition is also applied uniformly to said matrix resin-coated surface.

18. (Withdrawn) An intermediate material for FRP molding comprising a prepreg containing reinforcing fibers and a matrix resin, and a substrate containing essentially no

impregnated thermosetting resin composition, which is provided on at least one side surface of said prepreg, wherein a ratio $(B)/(A)$ between a thickness (A) of said prepreg and a thickness (B) of said substrate is within a range of 0.1 to 2.5.

19. (Withdrawn) A prepreg according to claim 18, wherein said matrix resin is a thermosetting resin composition.

20. (Withdrawn) An intermediate material for FRP molding according to claim 18, wherein said substrate containing essentially no impregnated thermosetting resin composition contains a fibrous thermoplastic resin.

21. (Withdrawn) An intermediate material for FRP molding according to claim 18, wherein said substrate containing essentially no impregnated thermosetting resin composition is a non-woven cloth of a thermoplastic resin.

22. (Withdrawn) An intermediate material for FRP molding according to claim 18, wherein said substrate containing essentially no impregnated thermosetting resin composition contains reinforcing fibers.

23. (Withdrawn) An intermediate material for FRP molding according to claim 22, wherein said reinforcing fibers are identical to said reinforcing fibers incorporated within said prepreg.

24. (Withdrawn) An intermediate material for FRP molding according to claim 22, wherein said reinforcing fibers are positioned at a different angle to said reinforcing fibers incorporated within said prepreg.

25. (Withdrawn) An intermediate material for FRP molding according to claim 22, wherein said reinforcing fibers are different from said reinforcing fibers incorporated within said prepreg.

26. (Withdrawn) An intermediate material for FRP molding according to claim 18, wherein said matrix resin is one of an epoxy resin composition and a phenol resin composition.

27. (Withdrawn) An intermediate material for FRP molding according to claim 18, wherein said reinforcing fibers incorporated within said prepreg are carbon fiber and/or glass fiber.

28. (Withdrawn) A process for producing an intermediate material for FRP molding, comprising the steps of preparing a prepreg using a lacquer-type process, and bonding a substrate containing essentially no impregnated thermosetting resin composition to at least one surface of said prepreg.

29. (Withdrawn- Previously Presented) A process for producing a fiber-reinforced composite material, comprising:

laminating a prepreg according to any one of claim 1 through claim 3, thereby obtaining a laminate, and

conducting molding of said laminate using vacuum bag molding.

30. (Withdrawn) A process for producing a fiber-reinforced composite material, comprising the steps of laminating an intermediate material for FRP molding according to claim 18, and conducting molding using vacuum bag molding.

31. (Withdrawn- Previously Presented) A process for producing a fiber-reinforced composite material, comprising:

laminating prepregs according to any one of claim 1 through claim 3 with identical side surfaces of said prepregs facing to identical directions.

32. (Withdrawn) A process for producing a fiber-reinforced composite material, wherein an intermediate material for FRP molding according to claim 18 is laminated with identical side surfaces of said intermediate material facing to identical directions.

33. (Withdrawn) A process for producing a fiber-reinforced composite material according to claim 29, wherein in said vacuum bag molding process, primary curing is conducted for at least 10 minutes at a primary curing temperature of no more than 150°C, and molding is then conducted at a temperature that is equal to, or greater than, said primary curing temperature.

34. (Withdrawn) A process for producing a fiber-reinforced composite material according to claim 31, wherein in said vacuum bag molding process, primary curing is conducted for at least 10 minutes at a primary curing temperature of no more than 150°C, and

molding is then conducted at a temperature that is equal to, or greater than, said primary curing temperature.

35. (Withdrawn- Previously Presented) A process for producing a fiber-reinforced composite material according to claim 29, comprising

deaerating said prepreg under conditions including a temperature within a range of room temperature to 50°C, and a pressure of no more than 50 Torr, and

conducting molding by raising temperature to a molding temperature, while said pressure is maintained at no more than 50 Torr.

36. (Withdrawn) A process for producing a fiber-reinforced composite material according to claim 35, wherein a rate of temperature increase during said raising of temperature to said molding temperature is set to no more than 1°C/minute when it starts from a point at least 20°C below said molding temperature.

BASIS FOR THE AMENDMENT

The claims have been amended to correct minor informalities as supported by the specification, drawings, for example, Example 9, and claims as originally filed.

No new matter is believed to have been added by entry of this amendment. Entry and favorable reconsideration are respectfully requested.

Upon entry of this amendment Claims 1-36 will now be active in this application. Claims 1, 3 and 15-36 stand withdrawn from consideration.